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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,232	04/26/2001	Ramin Moshiri-Tafreshi	4740-001	8386

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EXAMINER	
MATTIS, JASON E	

ART UNIT	PAPER NUMBER
2665	3

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/843,232	MOSHIRI-TAFRESHI ET AL.	
	Examiner	Art Unit	
	Jason E Mattis	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *4/26/01* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "1, 2, 3, 4, 5, and 6" have been used to designate signaling messages in Figure 4 and different signaling messages in Figures 3 and 5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Rezaiifar et al. (U.S. Pat. 6167270).

With respect to claim 1, Rezaiifar et al. discloses a method of managing network resources in a radio network **(See column 3 lines 6-20 of Rezaiifar et al. for reference to a method of providing channels for communication in a mobile network)**. Rezaiifar et al. also discloses establishing a packet data connection with an access terminal, remote station 6 **(See column 5 lines 13-34 of Rezaiifar et al. for reference to remote stations 6 establishing a connection and transmitting data to**

zero or more base stations 4). Rezaiifar et al. further discloses allocating network resources to the packet data connection with the access terminal, remote station 6, with the network resources including a fundamental radio frequency channel and a supplemental radio frequency channel **(See column 3 line 6-20 of Rezaiifar et al. for reference to allocating network resources including a fundamental channels and supplemental channels used to transmit high speed data)**. Rezaiifar et al. also discloses monitoring the activity status of the packet data connection using a first and second timers with the second timer having a duration value longer than the first timer **(See column 16 lines 4-26 of Rezaiifar et al. for reference to monitoring the period of inactivity, which is the time duration since the termination of the last data transmission, using a first time period and a second time period with the second time period being longer than the first time period)**. Rezaiifar et al. further discloses releasing the supplemental channel if the packet data connection is inactive for a period that exceeds the duration value of the first timer while maintaining the connection with the fundamental frequency channel **(See column 16 lines 4-26 and column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to placing a remote station 6 in a suspended mode if the idle time exceeds the first time period and for reference to the data traffic channel, which is the supplemental channel, being released and the channel that controls the data network connections, which is the fundamental channel, being maintained when a remote station 6 is in suspended mode)**. Rezaiifar et al. also discloses releasing the fundamental frequency channel if the packet data connection is inactive for a period that exceeds the duration value of the second

timer **(See column 16 lines 4-26 and column 17 lines 5-18 of Rezaiifar et al. for reference to placing a remote station 6 in a dormant mode if the period of inactivity exceeds the second time period and for reference to the channel that controls the data network connections, which is the fundamental channel, being released and no call related state information being retained, which means that the channel is released)**.

With respect to claim 2, Rezaiifar et al. discloses allocating base station controller resources to the packet data connection **(See column 5 lines 35-54 and Figure 2 of Rezaiifar et al. for reference to allocating base station controller resources to the packet data connection by assigning sector elements 14 to control the communications between one or more base stations 4 and one remote station 6)**.

With respect to claim 3, Rezaiifar et al. discloses maintaining the base station controller resources after expiration of the first timer **(See column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to maintaining controller resources by maintaining connection state information in the suspended mode, which the remote station 6 enters after the first time period has expired)**.

With respect to claim 4, Rezaiifar et al. discloses initiating call tear-down procedures to release the base station controller resources when the second timer expires **(See column 17 lines 5-18 of Rezaiifar et al. for reference to tearing down the call by not maintaining any call state information, controller resources, in the**

dormant mode, which the remote station enters after the second time period has expired).

With respect to claim 5, Rezaiifar et al. discloses a base station radio network **(See column 5 lines 13-34 and Figure 1 of Rezaiifar et al. for reference to a mobile communications system with a base station 4)**. Rezaiifar et al. also discloses a base transceiver station, base station 4, for communicating with an access terminal over a fundamental frequency channel and a supplemental frequency channel **(See column 5 lines 35-45 and column 3 lines 6-20 of Rezaiifar et al. for reference to a base station 4 and for reference to communicating over a fundamental channel and a supplemental channel)**. Rezaiifar et al. further discloses a base station controller 10 to perform channel allocation and supervision **(See column 5 lines 35-54 of Rezaiifar et al. for reference to a base station controller 10 performing channel allocation and supervision)**. Rezaiifar et al. also discloses the base station controller 10 having a first and second timers **(See column 16 lines 4-26 of Rezaiifar et al. for reference to a remote station's 6 period of inactivity being measure relative to a first and second time period, which means there must be a first and second timer to measure the first and second time periods)**. Rezaiifar et al. further discloses allocating the fundamental and supplemental radio frequency channels to the access terminal, remote station 6, to establish or maintain a packet data connection with the access terminal, remote station 6 **(See column 3 line 6-20 of Rezaiifar et al. for reference to allocating network resources to a remote station 6 including a fundamental channels and supplemental channels used to transmit high speed**

data). Rezaiifar et al. also discloses monitoring the activity status of the packet data connection using a first and second timers with the second timer having a duration value longer than the first timer **(See column 16 lines 4-26 of Rezaiifar et al. for reference to monitoring the period of inactivity, which is the time duration since the termination of the last data transmission, using a first time period and a second time period with the second time period being longer than the first time period)**. Rezaiifar et al. further discloses releasing the supplemental channel if the packet data connection is inactive for a period that exceeds the duration value of the first timer while maintaining the connection with the fundamental frequency channel **(See column 16 lines 4-26 and column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to placing a remote station 6 in a suspended mode if the idle time exceeds the first time period and for reference to the data traffic channel, which is the supplemental channel, being released and the channel that controls the data network connections, which is the fundamental channel, being maintained when a remote station 6 is in suspended mode)**. Rezaiifar et al. also discloses releasing the fundamental frequency channel if the packet data connection is inactive for a period that exceeds the duration value of the second timer **(See column 16 lines 4-26 and column 17 lines 5-18 of Rezaiifar et al. for reference to placing a remote station 6 in a dormant mode if the period of inactivity exceeds the second time period and for reference to the channel that controls the data network connections, which is the fundamental channel, being released and no call related state information being retained, which means that the channel is released)**.

With respect to claim 6, Rezaiifar et al. discloses allocating base station controller resources to the packet data connection **(See column 5 lines 35-54 and Figure 2 of Rezaiifar et al. for reference to allocating base station controller resources to the packet data connection by assigning sector elements 14 to control the communications between one or more base stations 4 and one remote station 6)**.

With respect to claim 7, Rezaiifar et al. discloses maintaining the base station controller resources after expiration of the first timer **(See column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to maintaining controller resources by maintaining connection state information in the suspended mode, which the remote station 6 enters after the first time period has expired)**.

With respect to claim 8, Rezaiifar et al. discloses releasing the base station controller resources when the second timer expires **(See column 17 lines 5-18 of Rezaiifar et al. for reference to releasing the call by not maintaining any call state information, controller resources, in the dormant mode, which the remote station enters after the second time period has expired)**.

With respect to claim 9, Rezaiifar et al. discloses a method of connection supervision in a radio network **(See column 3 lines 6-20 of Rezaiifar et al. for reference to a method of providing and supervising channels for communication in a mobile network)**. Rezaiifar et al. also discloses allocating resources to a connection between the radio network and a wireless access terminal, remote station 6, in response to receiving a request from the wireless access terminal, remote station 6

(See column 11 lines 28-33 of Rezaiifar et al. for reference to allocating resources in response to a request from a remote station 6 using an access channel). Rezaiifar et al. further discloses the resources including RF resources and base station controller resources **(See column 5 lines 35-54 and Figure 2 of Rezaiifar et al. for reference to allocating RF channels and base station controller resources to the packet data connection by assigning sector elements 14 to control the communications between one or more base stations 4 and one remote station 6).** Rezaiifar et al. also discloses releasing a portion of the RF resources allocated to the connection if the connection remains inactive for longer than a first time out period **(See column 16 lines 4-26 and column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to placing a remote station 6 in a suspended mode if the idle time exceeds a first time period and for reference to the data traffic channel being released and the channel that controls the data network connections being maintained when a remote station 6 is in suspended mode).** Rezaiifar et al. further discloses releasing a remaining portion of the RF resources and the BSC resources if the connection remains inactive for longer than a second time out period, with the second time out period being greater than the first time out period **(See column 16 lines 4-26 and column 17 lines 5-18 of Rezaiifar et al. for reference to placing a remote station 6 in a dormant mode if the period of inactivity exceeds the second time period and for reference to the channel that controls the data network connections being released and no call related state information being retained).**

With respect to claim 10, Rezaiifar et al. discloses de-allocating at least one RF channel allocated to the connection at a radio base station in the radio network **(See column 16 lines 4-26 and column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to placing a remote station 6 in a suspended mode if the idle time exceeds a first time period and for reference to the data traffic channel being released)**.

With respect to claim 11, Rezaiifar et al. discloses reducing the RF bandwidth allocated to the connection **(See column 16 lines 4-26 and column 16 line 28 to column 17 line 3 of Rezaiifar et al. for reference to placing a remote station 6 in a suspended mode if the idle time exceeds a first time period and for reference to the data traffic channel being released, which means the bandwidth is reduced)**.

With respect to claim 12, Rezaiifar et al. discloses initiating call tear-down procedures to de-allocated the connection processing resources and the remaining portion of the RF resources **(See column 17 lines 5-18 of Rezaiifar et al. for reference to tearing down the call by not maintaining any call state information, controller resources, in the dormant mode, which the remote station enters after the second time period has expired)**.

With respect to claim 13, Rezaiifar et al. discloses setting the relative duration of the first and second time out periods to maximize the number of connections that can be supported by the radio network on average based on a relationship between RF resource capacity of the radio network and connection processing capacity of the radio network **(See column 15 line 64 to column 16 line 26 of Rezaiifar et al. for reference**

to using the time periods to more fully utilize forward and reverse link capacity and for reference to selecting specific 1 second and 60 second times for the first and second time periods in order to maximize the RF capacity utilization).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Noneman et al. (U.S. Pat. 5708656)** discloses, in a wireless communications system, transmitting at a lower rate after a first timer expires and releasing packet data service after a second timer expires. **Cheng et al. (U.S. Pat. 6393008)** discloses releasing a supplemental channel in response to a timer expiring. **Bender (U.S. Pat. 6377814)** discloses deactivating connections when an access terminal is idle for a predetermined amount of time. **Gorsuch et al. (U.S. Pat. 6081536)** discloses de-allocating extra sub-channels after an idle timer expires. **Tripathi et al. (U.S. Application 09/836454)** discloses releasing a supplemental channel when a lock time has expired.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E Mattis whose telephone number is (703) 305-8702. The examiner can normally be reached on M-F 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703) 305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jem

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PRIMARY EXAMINER